



Itona TC63yy

Hardware User Guide

Information in this document is subject to change without notice and does not represent a commitment on the part of the manufacturer. No part of this guide may be reproduced or transmitted in any form or means, electronic or mechanical, including photocopying and recording, for any purpose, without the express written permission of the manufacturer.

Every effort has been made to make this guide as complete and as accurate as possible, but no warranty or fitness is implied. The authors and the publisher shall have neither responsibility nor liability to any person or entity with respect to loss or damages arising from the use of information contained in this guide. This disclaimer does not apply in countries where such provisions are inconsistent with local law.

All Trademarks are acknowledged.

Last Updated: September, 2012

Version: TC63yy/UG-37-12

VXL Instruments Ltd,
House of Excellence,
No. 17, Electronics City,
Hosur Road,
Bangalore– 560 100, INDIA
www.vxl.net

Federal Communication Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment Off and On, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / television technician for help.

Each Thin Client is equipped with a FCC compliance label that shows only the FCC identification number. The full information of the associated label is as follows:

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Regulatory Certifications



RoHS



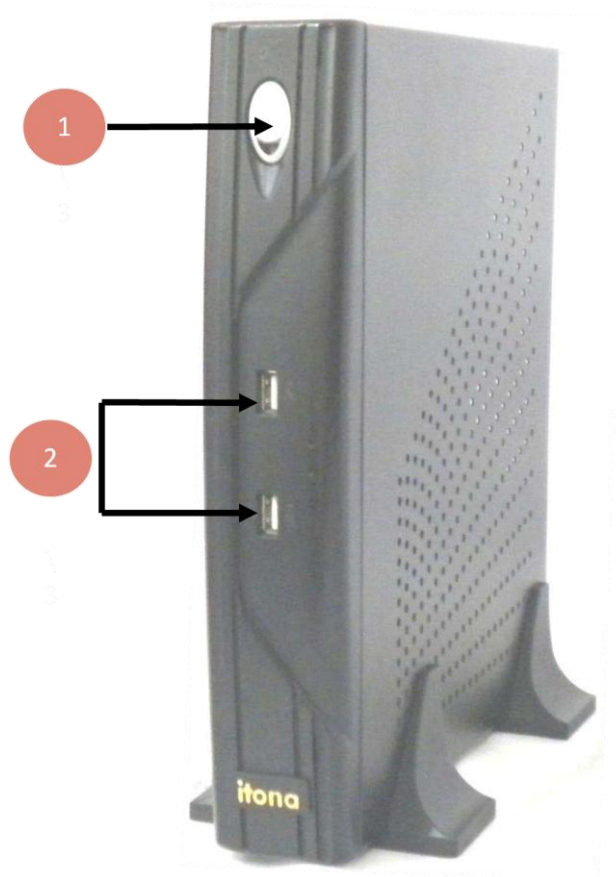
Table of Contents

Federal Communication Commission (FCC) Statement	i
Regulatory Certifications	ii
1 Introduction	1
About the User Guide	1
Abbreviations and Acronyms	2
Chapters in the Manual	2
2 Installation	4
Unpacking the Unit	4
Preparing to Connect	4
Connecting the Accessories and Power Supply	5
Connecting to the Server	7
3 Specifications	8
Hardware	8
Mechanical	8
Environmental Operating	8
Electrical – External Power Adapter	9
4 Troubleshooting	10
Appendix	11

1 Introduction

Thin Clients are terminal devices that connect to multi-user application servers operating under Citrix MetaFrame and Windows Server 2000/2003 operating systems.

This guide covers installation procedure and hardware details of Itona TC 63yy series..



- 1. Power Button.
- 2. USB Ports.

Figure 1: ItonaTC63yy

Itona TC63yy deliver smart and robust solutions for Thin Client computing. They are aesthetically and ergonomically designed compact desktop. Itona series thin clients offer fanless CPU solution to enhance reliability.

About the User Guide

This User Guide provides step by step instructions to install Itona D series hardware. The specifications and troubleshooting steps are also included in this User Guide.

Abbreviations and Acronyms

Abbreviation	Expansion
AC	Alternating Current
DC	Direct Current
LAN	Local Area Network
LED	Light Emitting Diode
TCP/IP	Transmission Control Protocol/Internet Protocol
USB	Universal Serial Bus
VESA	Video Electronics Standards Association
VGA	Video Graphics Array

Table 1: Abbreviations and Acronyms

Chapters in the Manual

Chapter No	Chapter Name	Description
1	Introduction	Contains an overview of the product, information about this guide and abbreviations used in this guide.
2	Installation	Contains the procedure to set up the hardware.
3	Specifications	Contains hardware, mechanical, electrical, interface and operating environment specifications
4	Troubleshooting	Contains solutions to problems that you may encounter while using the product.
—	Appendix	Contains detailed specifications for connectors and cables used with the product.

Table 2: List of Chapters



Warning

- Do not open enclosure, hazardous voltages present inside equipment.
- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
- There is no user serviceable part inside. Do not open enclosure, hazardous voltages present in the equipment's components. Do not disassemble the equipment as this can nullify your warranty.

- This equipment must be earthed to prevent accidental electric shocks, connect a three pin connector to ensure adequate earthing.
- As a precaution, the AC socket outlet should be near the equipment and should be easily accessible.
- Sound Power Level is less than 60dB (A), when measured according to ISO 7779.

 **Caution**

- Ensure that all expansion slots (on the back or side of the client) are covered with metal retaining brackets, and tightly attached to the computer cabinet.
- Only equipment certified to comply with Class B (computer input/output devices, terminals, printers etc.) should be connected to this equipment, and must have shielded interface cables.
- This equipment should not be used in electro-medical applications.
- Do not operate this equipment in corrosive or explosive atmosphere.
- Operate this equipment within specified temperature limits.

2 Installation

You have to install the client before you can use it. Installation involves setting up the hardware and connecting the peripherals required for normal use.

To install the Itona TC 63yy hardware, perform the following steps:

1. Unpack the unit.
2. Prepare to connect.
3. Connect the accessories and power.
4. Connect to the server

Each step is explained in detail in this chapter.

Unpacking the Unit

Unpack the unit from its carton box, handle safely to ensure you do not damage any components during unpacking.

The carton in which the product was shipped to you contains the following:


- Itona TC 63yy Series Thin Client
- Power cord (optional)
- Wall mounting bracket-single side
- Hardware Installation Guide

Ensure that all the contents mentioned above are in the carton. Contact the dealer or reseller from whom you have purchased the product if any of those are missing.


 **Note:** Please retain the original carton and packing material for future use.

Preparing to Connect

1. Ensure that the following are available at the site where you want to install the product.
 - 100~240V AC, 0.65A, 50/60 Hz, 3-pin power inlet for power adapter .

 **Note:** Ensure that the power inlet plug is regulated and earthed. A floating ground/chassis could cause an electric shock.

- Well ventilated, clean, dry and dust free atmosphere.
- Specified environmental conditions. For more information see, Environmental Operating Specifications on page 8.

 **Note:** The product can only be used in vertical position. Do not place it flat on a desk as it will block the air vents and heat up.

2. Place the product on the table in a location that provides quick and easy access to the power Inlet plug to shutdown the power in emergencies.
3. Ensure a minimum space of 2 inches (5 cm) on all sides of the unit for efficient convection cooling.

Connecting the Accessories and Power Supply

The various connectors available on the rear panel of the client are shown in Figure 2.

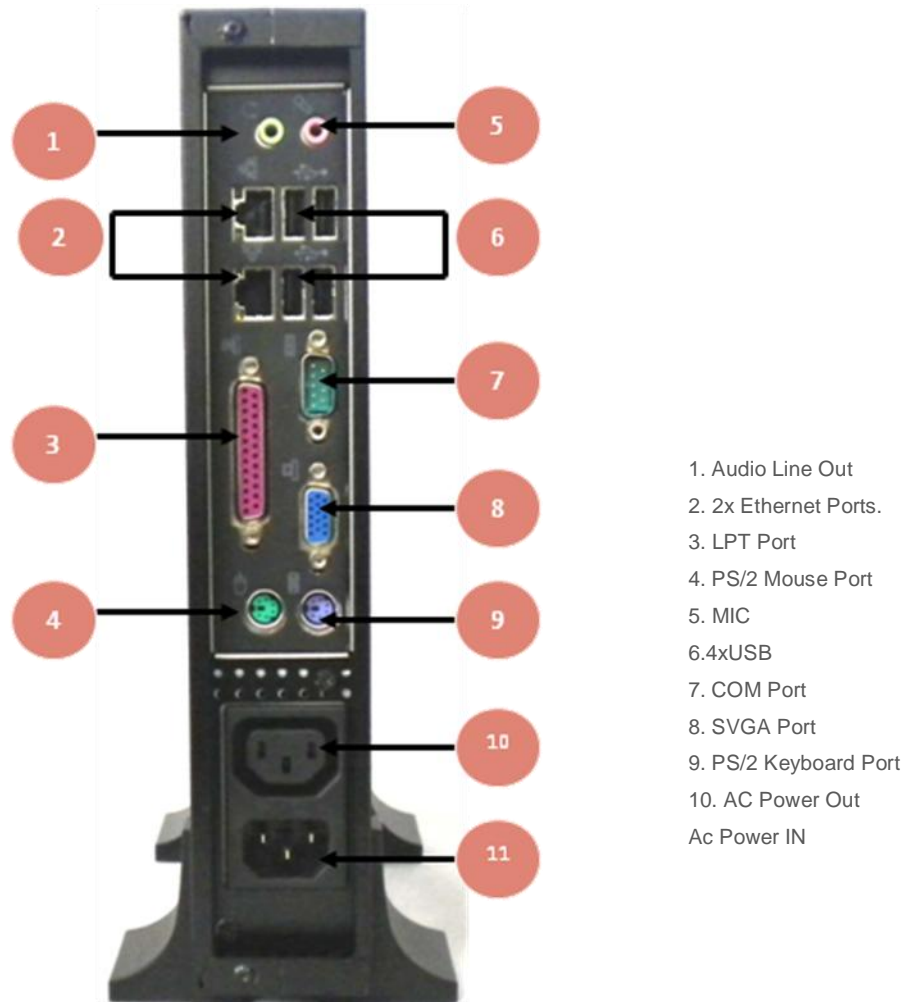


Figure 2: Itona TC63yy Series Rear View








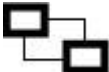
Connectors	Connector Symbol
Video port	
USB port	
Audio output (LINE OUT) port	
Microphone input port	
PS/2 Keyboard port	
PS/2 Mouse port	
COM port	
Parallel/LPR port	
RJ45 Ethernet port	

Table 3: Connector Symbols



Note: Before connecting any cables, ensure that the power cable is unplugged from the unit.

To connect various accessories and power supply:

1. Connect the DVI cable from your display unit to the DVI-I port.
2. Connect the USB devices to the USB ports.
3. Connect the external powered speakers to the audio output (LINE OUT) port.
4. Connect the microphone to the microphone input port.
5. Connect the mouse and keyboard to the USB slots.
6. Connect the LAN cable to the RJ45 Ethernet port.
7. Connect the DC power adapter to the DC power in.



Caution:

- Ensure the Power Rating Spec before Connecting Power Cable.
- Ensure that Video port adequately fastened with the screws provided with the cables.

Connecting to the Server

The Thin Client can be physically connected to the server/network by connecting to LAN through TCP/IP.

To connect client to LAN through TCP/IP:

1. Connect one end of a 10/100/1000 cable to the Ethernet LAN port of the client.
2. Connect the other end to a LAN hub as shown in Figure 3.

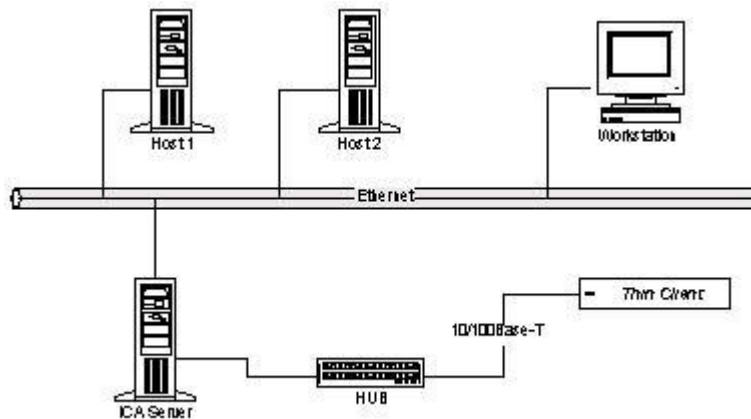


Figure 3: LAN Connection through TCP/IP

3. Press the power button to switch on the ItonaTC15yy series thin client. The front panel LED lights up and the client starts with a beep sound. The Connection Manager screen appears.



Note: To configure the client, refer to the Software User's Guide.

3 Specifications

Hardware

Processor	Intel Atom N270 1.6 GHz
VGA Memory	Shared Video Memory 64MB min, 128MB max.
Flash	IDE 44 Pin
RAM	128MB ~ 2GB DDRII 533/667
Networking1	10/100Mbps
Networking 2	10/100/1000Mbps
Power Supply	Internal Power Supply
Display Resolution	16/32 Bits 1920x1200 @60Hz max

Mechanical

Product Dimension

Height	1268mm
Width	50 mm
Depth	250 mm
Weight	3,.0 Kg (max)

Environmental Operating

Operating temperature	+ 5°C to +40°C
Storage temperature	- 20° C to +60°C
Humidity	20% to 80% RH Max non-condensing

Electrical – External Power Adapter

Line Voltage	100V to 240V AC (+6, -10%)
Line Frequency	50 / 60 Hz
Power Inlet	1.2A, 3-pin power plug (IEC 320)
Power Oulett	3-pin power socket (IEC 320) For devices upto 0.30A max., 100VAC~50/60Hz. For devices upto 0.12A max., 240VAC~50/60Hz.
MTBF	>50,000Hrs

4 Troubleshooting

This chapter contains solutions for problems you may encounter while using the product.

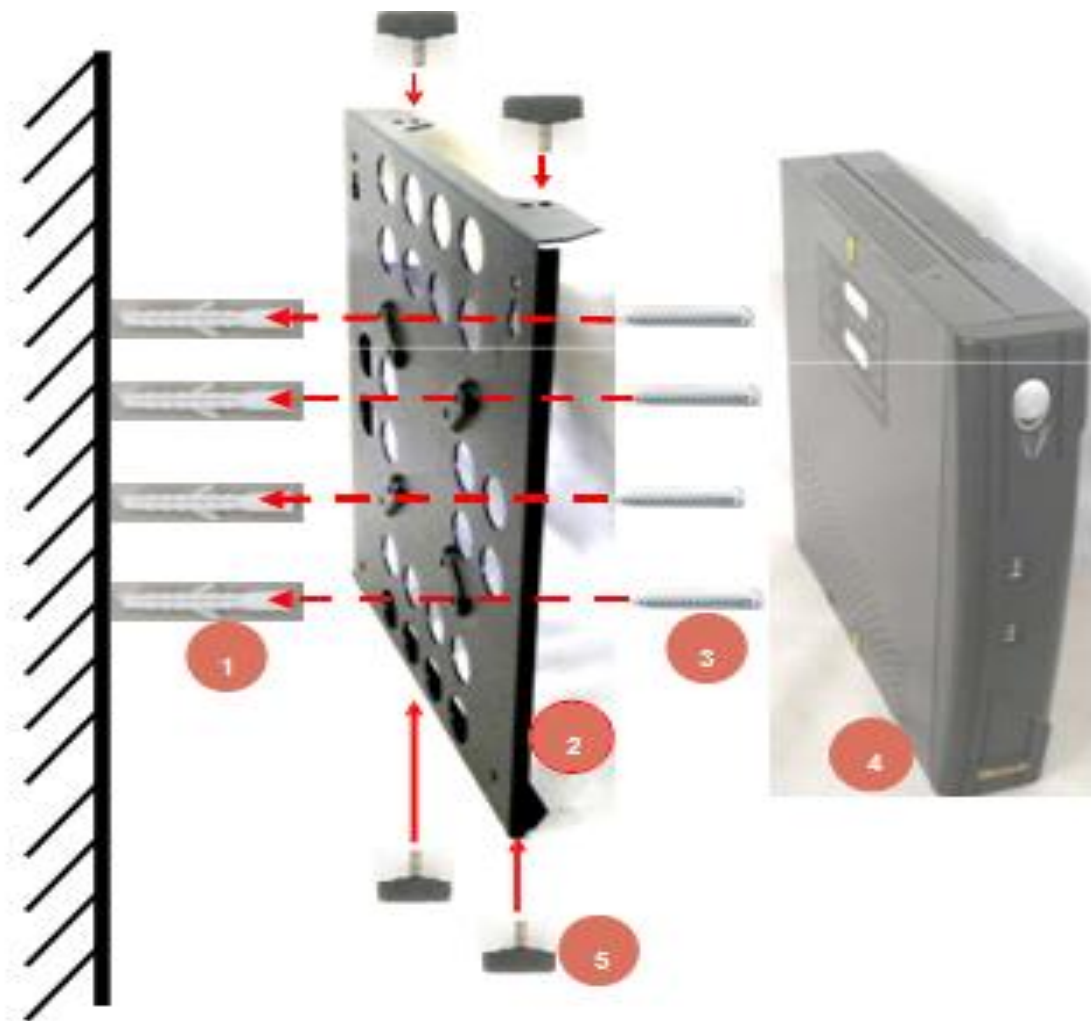
Problem	Solution
The power-LED on front panel does not glow when the client is switched on.	<ul style="list-style-type: none">✓ Ensure that the power cord is plugged into an AC outlet.✓ Check the fuse in the power-plug, if available.
There is no display on the monitor, though the power-indicating LED glows.	<ul style="list-style-type: none">✓ Ensure that the video cable is properly connected..
The mouse (or keyboard) does not work when the client is switched on.	<ul style="list-style-type: none">✓ Ensure that the mouse (or keyboard) is plugged into the correct PS/2 port on the rear panel.

Appendix

Side Wall Mounting Bracket

To install single side wall mounting bracket for TC63yy:

1. Drill four holes on the wall and insert four M7x33 wall plugs..
2. Place Single Side Wall Mounting Bracket
3. Fix the four M4x24 self taped screws.
4. Place the Unit
5. Fix the four M3x8 thumb screws M3x8.

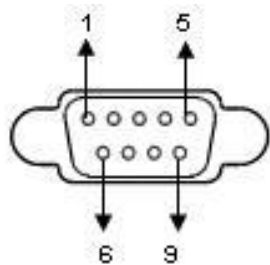


Connectors

The following section provides pin details for various connectors on the rear panel of the client.

COM Port

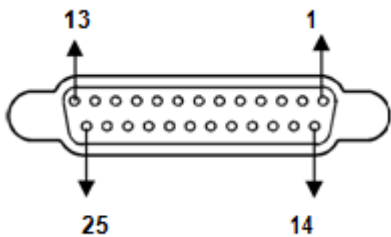
9-pin D-type male connector, RS232C compatible, operating at 115.2K baud maximum.



Pin	Signal	Description
1	DCD	Data Carrier Detect
2	RxD	Receive Data
3	TxD	Transmit Data
4	DTR	Data Terminal Ready
5	GND	Signal Ground
6	DSR	Data Set Ready
7	RTS	Request To Send
8	CTS	Clear To Send
9	NC	Not Connected

Printer Port(Parallel)

25-pin D-type female connector. ECP/EPP compatible.

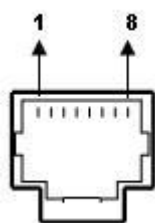


Pin	Signal
1	STROBE
2-9	DATA 0 – 7

10	ACKNOWLEDGE
11	BUSY
12	PAPER END
13	SLCT
14	AFD
15	ERROR
18-25	GROUND

10/100/1000 Ethernet LAN Port

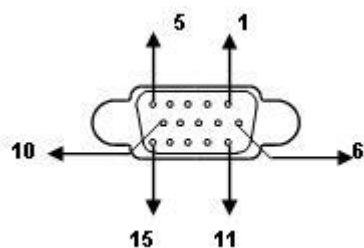
RJ-45 modular 8-pin jack. 10/100/1000 Mbps.



Pin	Signal
1	TxD+
2	TxD-
3	RxD+
6	RxD-

Video Port

15-pin D-type female connector.



Pin	Signal	Pin	Signal	Pin	Signal
1	Red	6	Red return GND	11	No Connection

2	Green	7	Green return GND	12	No Connection
3	Blue	8	Blue return GND	13	Horizontal Sync
4	No Connection	9	No Connection	14	Vertical Sync
5	GND	10	No Connection	15	No Connection

Mouse/keyboard Port

PS/2 Mouse / Keyboard connector.



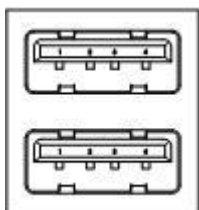
Pin	Signal	Pin	Signal
1	Mouse/Keyboard data	4	VCC
2	NC	5	Mouse/Keyboard clock
3	GND	6	NC

Audio / Microphone Port

Standard audio jacks.

USB Port

4-pin series-A receptacle. 4~ 5 ports depending on the model. Both USB1.1 and USB2.0 models are available

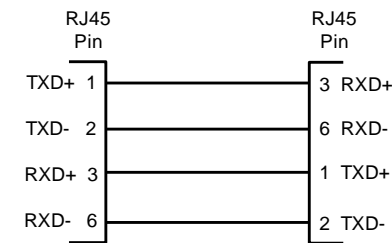


Pin	Signal
1	VCC
2	D-
3	D+
4	GND

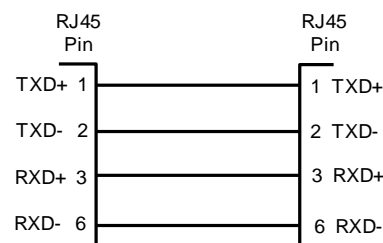
Cables

10/100/1000 LAN Cable

Cross Connection-(Without Hub)



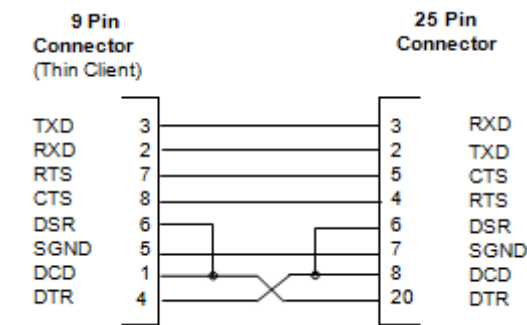
Straight Connection-(With Hub)



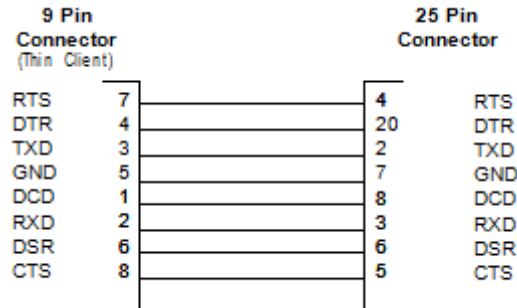
COM Port (Serial Port) Cables

Serial devices like modems and printers use 25 pin D-type connectors for RS232 connections. In order to connect an RS232 device with a 25-pin connector, 9-pin connector signals must be converted to 25-pin connector signals as shown in the following diagram.

9-pin to 25-pin Cross Connection

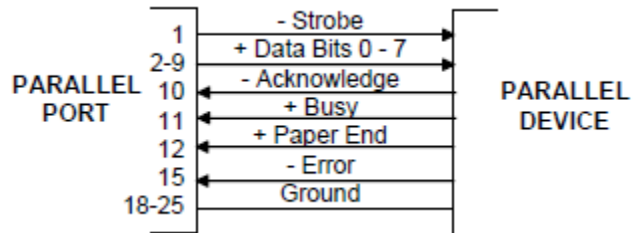


9-pin to 25-pin Straight Connection



Printer Cable

The following table shows the pin connections of the Standard Centronics parallel cable. Some manufacturers change pin functions or polarity on their printers. For such printers, custom cables may be necessary. Refer to your printer manual for cabling information in such cases.



Note: Use certified shielded cables only.